

161 159
CLAIM 179. An oscillating sprinkler unit as in claim 171 wherein:

said biasing means includes over-center spring means.

162 159
CLAIM 174. An oscillating sprinkler unit as in claim 171 wherein:

said biasing means includes spring means for imposing a load directly on said shifting arm means.

REMARKS

Applicant and his attorney want to acknowledge and thank the Examiner for the courtesy of the extremely productive interview conducted on April 19, 1994. The substance of the interview and the agreements reached on allowance of claims will be reflected in this Amendment.

Claims 27 and 43 have been amended to recite a first biasing means for biasing both the toggle and the gear cage, and a second biasing means for biasing the gear cage. This clearly distinguishes over Hunter. Hunter has spring means (springs 56) which engage his toggle (shifting lever 54) to bias the shifting lever and gear cage (yoke 36, 42) in one direction or the other. However, Hunter does not have a second spring means engaging the gear cage. The presence of two springs 56 in Hunter should not cloud the issue. These two springs are both connected to the shifting lever to bias it in one direction or the other. Neither of those springs is connected to the gear cage (Hunter's yoke) to separately bias the gear cage. Accordingly, claims 27 and 43 distinguish over Hunter, and claims 27-31 and claims 43-46 should be allowable to applicant. The foregoing was discussed with the Examiner at the interview, and the Examiner stated that claims 27 and 43 were allowable to applicant.

Int.
Summary
OK
12/7/94

122 123

Claims 102 and 108 correspond, respectively, to claims 63 and 69 (priority awarded to applicant in interference 101,982), with the principal difference being that the drive gear means is more broadly recited in claims 102 and 108. Since claims 63 and 69 are allowable to applicant, claims 102 and 108 should also be allowable. Similarly, dependent claims 103-107 (corresponding to claims 64-68) and claims 109-111 (corresponding to claims 70-72) should also be allowable along with their independent claims. The foregoing was discussed with the Examiner at the interview, and the Examiner stated that claims 102-111 were allowable to applicant.

Claims 112-118 are new. These claims are directed to the biasing systems wherein one biasing system biases both the shift means (toggle) and carrier, and the other biasing system biases the carrier. These claims clearly distinguish over Hunter, which has only one biasing spring system to impose a bias on the shift means or toggle. Hunter does not have a biasing system to impose a separate bias on the gear carrier. Therefore, claims 112-118 should be patentable to applicant. The foregoing was discussed with the Examiner at the interview, and the Examiner stated that claims 112-118 were allowable to applicant.

New independent claims 119, 127 and 136, and the claims dependent thereon relate to the feature of the setting means at the top of the nozzle for changing the arc of oscillation and the indicator for providing a visual representation thereof. Those claims distinguish over the prior art and should be allowable to applicant. The patent to Hunter 4,624,412 (disclosed to the Examiner at the interview and the subject of an Information Disclosure Statement submitted herewith) discloses a nozzle in which arc set apparatus is located in a recess 60 beneath the top of the sprinkler, and beneath a cap 128 (see FIGURES 2 and 9). The arc set apparatus is spring members 64 located in recess 62. Element 66 is not an indicator at the top of

the nozzle for providing visual indication. Rather, element 66 is a shifting element which, when contacted by fingers 64, operates to reverse the direction of oscillation. However, Hunter does not have either a setting mechanism or indicator means at the top of the nozzle head. The foregoing was discussed with the Examiner at the interview, and the Examiner stated that claim 119, and claims 120-126 dependent thereon, and claim 127, and claims 128-135 dependent thereon, and claim 136, and claims 137-144 dependent thereon, were allowable to applicant.

Applicant is also submitted herewith several claims which were not discussed at the interview. Applicant's attorney regrets that these claims were not presented and discussed at the interview, but the need for these claims became apparent only upon review of the case after the interview.

The new claims include independent claims 145, 153 and 162 and claims dependent thereon which are patterned, respectively on allowed claims 119, 127 and 136 and claims dependent thereon. New independent claims 145, 163 and 162 all distinguish over Hunter 4,624,412 by the recitation in the last two subparagraphs. the penultimate paragraph of each of those claims recites setting means above the angular limit contact means and connected to at least one of the angular limit contact means; and the last paragraph of each claim recites indicator means at the top of the nozzle head for providing a visual representation. Neither of those features is present in Hunter 4,624,412, and it is respectfully submitted that applicant is entitled to these claims, and the claims dependent thereon, to have proper protection for the scope of his invention.

New independent claim 171 is substantively the same (i.e., with minor changes) as claim 26 previously allowed in application Serial No. 07/724,406, which is a continuation-in-part of this application. A review of that claim has led to the


conclusion that it should properly be included in this case rather than in the continuation-in-part application, and the allowed claim of the continuation-in-part application has been amended to maintain a line of distinction. Claim 171 distinguishes from all of the Hunter patents of record by the recitation of biasing means for placing and retaining the shiftable carrier in one of the driving positions until shifted therefrom by the shifting arm means. In Hunter, the spring loading is imposed on the element referred to as the trip arm. Once the trip arm is moved a sufficient arcuate distance to disengage one drive gear from the output gear, there is no further actuating force applied to the trip arm by the output gear (because the output gear is no longer being driven), and the condition can occur that the gear carrier is not moved sufficiently to cause the other drive gear to engage and stay engaged with the output gear. The unit may then stall and not oscillate. The biasing means recited in claim 171 overcomes this problem by applying a bias to the gear carrier to affirmatively place and retain the carrier in the position where the other drive gear engages the output gear. Accordingly, claim 171, and dependent claims 172-174 should be also be allowable to applicant.

If there are any charges with respect to this amendment, or otherwise,
please charge them to Deposit Account No. 06-1130 maintained by Applicant's
attorney.

Respectfully submitted,

CARL L. C. KAH, JR.

FISHMAN, DIONNE & CANTOR
Applicant's Attorneys

By 
David S. Fishman
Registration No. 19,758

Date: April 28, 1994

Address: 88 Day Hill Road, Windsor, Connecticut 06095

Telephone: (203) 688-4470